Income Tax Preparation System for Traveling Taxpayers

Field of Invention

The invention pertains to automated income tax preparation systems. More particularly, the invention relates to tax preparation systems designed to handle the extensive

5   and complex calculations relating to taxpayers who travel regularly as part of their employment, such as merchant seamen and airline pilots and flight attendants.

Background of the Invention

Various types of systems have been developed for handling travel itineraries and

10   income tax preparation; incorporating a number of different technologies. U.S. Patent No. 6,009,408 issued to *Buchanan* is directed to automated processing of travel related expenses. Computer systems associated with the Internal Revenue Service can be linked with the travel information processing system by a suitable communication subsystem collects information supporting tax returns from customers. Because the taxable income of a particular customer

15   may often be reduced by the amount of travel related expenses incurred by travelers associated with customer, customers may request that receipt information kept in travel information processing system be sent to IRS system.

U.S. Patent No. 5,237,499 issued to *Garback,* is directed to a computer travel planning system. A computer based system for processing travel requests directed to a specific venue

20   from individual members of a sponsored group is provided. The system comprises a database containing a venue file including information regarding the specific venue, a group member file for each individual member of the group, a travel policy file containing information on pre-selected vendors of various travel services, and a city code file containing codes

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corresponding to a plurality of city airport locations. The database includes a travel policy file

that contains information on pre-selected airline carriers, pre-selected room accommodation

providers, and pre-selected ground transportation providers.

U.S. Patent No. 5,948,040, issued to *DeLorme et al.* is directed to a travel reservation

5   information and planning system. Menus generated by this system enable flexible user

inquiries accessing selectable geographic, topical, temporal and transactional data records and

relational processing. Some menus provide further capabilities: e.g., routing, topical

searching, searches of event calendars, almanacs, appointment books, related itinerary

schedule, trip budgeting issues, and travel arrangement availabilities for other goods/services

10   offers. An online computer aided routing system enables input of selectable travel origin,

destination, and waypoints to compute travel route, available transportation services, costs,

options, and schedules. The system provides the capability to determine the mode or modes

of travel required to reach each destination, make the reservations associated with the travel,

find the accommodations and activities available, plus take advantage of diverse, special

15   offers for goods and services from participating providers.

U.S. Patent No. H1,830 issued to *Petrimoulx et al.* is directed to a system for use-tax

determination. The system relates to computer implemented tax preparation and tax

submission accounting, and the system is directed to providing a system that enables use-tax

accrual and determination. The system provides a machine for use-tax determination which

20   has: (A) transaction record acquisition logic for acquiring transaction information

characterizing purchases of goods and services and generating transaction records; (B) use-tax

logic; and (C) tax rate acquisition logic for acquiring tax jurisdiction codes, at least one

inclusive accounting group registry respective to taxes, and tax information respective to the

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tax jurisdiction codes for plurality of state jurisdictions, and generating a data schema with data elements describing the inclusive accounting group registry, tax jurisdiction codes, and tax information.

While other variations exist, the above-described systems for travel planning and tax return preparation are typical of those encountered in the prior art. It is an objective of the present invention to provide a system that can determine the per diem expense allowances for a taxpayer required to stay overnight for work purposes in any city identified by the Internal Revenue Service. It is a further objective to provide a means for determining the cities visited by a merchant seaman based upon the identity of his ship and his dates of employment upon it. It is a still further objective of the invention to provide means to prepare complete printed tax returns including a printout of the travel locations with appropriate rates for the taxpayer, relevant code sections underlined, etc. It is yet a further objective to provide an accurate system that will permit preparation of travel-related tax returns with substantially reduced manual effort on the part of tax preparation personnel.

While some of the objectives of the present invention are disclosed in the prior art, none of the inventions found include all of the requirements identified.

Summary of the Invention

The present invention addresses all of the deficiencies of prior art tax return preparation inventions and satisfies all of the objectives described above.

A system for determining travel deductions for taxpayers who stay overnight in cities remote from their homes as part of their employment, includes the following components. A city rate table is provided. The city rate table identifies allowed per diem expense rates for a

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given tax year for a plurality of cities as identified by a city code. Means are provided for inputting and maintaining data in the table. Means are provided for inputting cities visited and durations of stay for a taxpayer. Means are provided for inputting expense reimbursements received from the taxpayer's employer. Means are provided for calculating a total of all per

5   diem expenses based upon the city rate table and the input cities and number of days of stay in the cities. Means are provided for offsetting the reimbursements against the total to determine an incidental expense allowance.

In a variant of the invention, a client information table is provided. The client information table includes a taxpayer's name, address, zip code, Social Security number and a

10   work code. A USA States table is provided. The States table includes each state's name, a state ID code, a lower 48 state code, and an IRS center code. The city rate table also includes a tax year, a city code, combined meal and incidental rate, full rate, and high cost city code. A city name table is provided. The city name table includes the city code, city, state ID code, and country name. Supporting schedules are provided. The supporting schedules merge data

15   from the client information table, the USA States table, and the city rate table with the input cities and durations of stay for the taxpayer. Means are provided for inputting and maintaining data in each of the tables.

In a further variant, an airport table is provided. The airport table includes an airport identifier code, an airport name, city code and country name. When a location is input using

20   either of an airport identifier code and an airport name, the appropriate city is determined for use in the supporting schedules.

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In yet a further variant of the invention, an airline table is provided. The airline table includes an airline name and an airline ID number. The airline table permits data merged with the client information table to be sorted by airline.

In still a further variant, an IRS service centers table is provided. The IRS service centers table includes an IRS mailing address for tax return submission, an IRS mailing address for submitting estimated tax payments and an IRS ID code. The IRS service centers table is merged with the supporting schedules to determine an address to mail either of a taxpayer's federal tax return and a taxpayer's federal estimated tax payments to.

In another variant, a state service centers table is provided. The state service centers table includes a state income tax mailing address for tax return submission, a state mailing address for submitting estimated tax payments and a state ID code. The state service centers table is merged with the supporting schedules to determine an address to mail either of a taxpayer's state tax return and a taxpayer's state estimated tax payments to.

In still another variant of the invention, a zip code table is provided. The zip code table includes a five-digit zip code, a corresponding city, county and state. The zip code table is used to verify the zip code input in the client information table and to provide the taxpayer's county. The zip code table is used to generate mailing labels for the taxpayer's state and federal tax returns.

In yet another variant, an attachments table is provided. The attachments table stores links to IRS and state tax publication pages, tax year and work code. The attachments table is compared to the client information table to determine appropriate publication pages to include with the taxpayer's tax returns.

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In still another variant, a meal rate percent table is provided. The meal rate percent table includes the tax year and meal rate percent. The meal rate percent is used to reduce the meal rate allowed.

In yet another variant of the invention, further supporting schedules display a taxpayer's travel computations and provides means to calculate the taxpayer's travel deduction based upon the plurality of travel calculation rates allowed by the IRS. The further supporting schedules provide means to enter the expense reimbursements received from the taxpayer's employer. The further supporting schedules provide means to optionally decline use of the meal rate percent table to reduce the meal rate allowed. The further supporting schedules provide means to print out IRS publications and revenue procedures related to the taxpayer's occupation. The further supporting schedules provide means to print out an IRS rate sheet for each city visited. The rate sheets are printed in descending order based upon the taxpayer's travel deduction for each city visited with the city highlighted on each sheet.

In a further variant a plurality of customizable document templates are provided. The templates are selected by the system based upon tax year, work code, combined meal and incidental rate, incidental portion and full rate applied and an amended return code. The templates include a taxpayer's name, Social Security number, tax year, occupation description, legal justification for claiming travel deductions, each city visited, applicable deduction for the city, a total travel deduction figure, expense reimbursements received from the taxpayer's employer, meal rate percent for the tax year, a meal rate percent reduction amount and a remaining amount available for deduction.

In still a further variant, a ship location table is provided. The ship location table includes city rate codes for each day of a tax year for a plurality of ship name codes. Means

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are provided for inputting names of ships on which a taxpayer has worked and starting and ending dates for work on each of the ships. Means are provided for determining locations and durations of stay for the taxpayer based upon the ship location table and the input ship names and starting and ending dates for work on each of the ships.

5   In yet a further variant, a shipping company documents table is provided. The shipping company documents table includes a shipping company ID code and a pointer to a shipping company document file name. A shipping companies table is provided. The shipping companies table including the shipping company ID code and a shipping company name. Means are provided for printing the shipping company document.

10   In still a further variant, a ship names table is provided. The ship name table includes a ship name code, the ship name, the shipping ID code and each ship's e-mail address.

In another variant of the invention, other supporting schedules merge the ships location table and the city rate table to provide meal and incidental rates and full rates for each city visited. Means are provided for determining the highest meal and incidental rates and full

15   rates applicable for taxpayers traveling between cities for more than one day.

In still another variant, a series of data entry templates is provided. The templates include the ship locations recorded in the ship location table for names of ships associated with each shipping company name. The templates permit rapid entry of ship locations for ships following identical routes, the routes having different starting dates.

20   In yet another variant, means are provided for reviewing the travel start and end dates for any input ship name and tax year.

In a further variant, a merchant sailor schedule table is provided. The merchant sailor schedule table includes the taxpayer's name, the ship name, the trip start date and the trip end

date as recorded on the taxpayer's U.S. Coast Guard Discharge Papers. The merchant sailor

schedule table is used in conjunction with the ship location table to provide the incidental

portion of meal rates and full rates for each city visited by the taxpayer in a tax year.

In still a further variant of the invention, means are provided for printing a ports of call

5   statement illustrating the location of a ship for each day of a tax year.

In yet a further variant, means are provided for accessing the client information table

and the merchant sailor schedule table to provide a listing of all of the taxpayers associated

with any ship during a tax year and the means for contacting the taxpayers.

In another variant, means are provided for displaying a chronological listing of all of

10   the U.S. Coast Guard Discharge Paper data input for the taxpayer for a tax year to the

merchant sailor schedule table to determine if any travel days are unaccounted for.

In a final variant of the invention, means for identifying all tasks associated with the

preparation of a tax return are provided as are means for identifying all results associated with

the performance of the tasks. Means are provided for linking the results to a subsequent task.

15   Means are provided for determining the skill level of a tax preparation worker required to

complete each task as are means for identifying the skill level of each tax preparation worker.

Means are provided for assigning each uncompleted task to workers of the required skill level

as are means for indicating which worker will work on each task. Means are provided for

indicating completion of each task for removal from the system.

20   An appreciation of the other aims and objectives of the present invention and an

understanding of it may be achieved by referring to the accompanying drawings and the

detailed description of a preferred embodiment.

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Description of the Drawings

Figure 1 is a schematic view of the City Rates Table used in the preferred embodiment of the invention;

Figure 2 is a schematic view of the City Rates input screen;

5 **Figure 3** is a schematic view of the City Schedule input screen;

Figure 4 is a schematic view of one of the supporting schedules used to determine a net expense allowance;

Figure 5 is a schematic view of the client information table input screen;

Figure 6 is a schematic view of the USA States table;

10 **Figure 6A** is a schematic view of the City Name table;

Figure 7 is a schematic view of the Airports table;

Figure 8 is a schematic view of the Airlines table;

Figure 9 is a schematic view of IRS Service Centers table;

Figure 10 is a schematic view of the State Service Centers table;

15 **Figure 11** is a schematic view of the Zip code table;

Figure 12 is a schematic view of the Attachment input screen;

Figure 13 is a schematic view of the Ship Companies input screen;

Figure 14 is a schematic view of the Meal Rate Percent table;

Figure 15 is a schematic view of the Ship Location table;

20 **Figure 16** is a schematic view of the Merchant sailor Schedule input screen;

Figure 17 is a schematic view of the Ship Companies table;

Figure 18 is a schematic view of one of the supporting schedules used to view sailor trip start and end dates;

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Figure 19 is a schematic view of the Ship Company Documents table;

Figure 20 is a schematic view of the Ship Names table;

Figure 21 is a schematic view of the Ship Names input screen;

Figure 22 is a schematic view of the Sailing Schedule template screen;

5   **Figure 23** is a schematic view of the Ports of Call List for a ship for a tax year;

Figure 24 is a schematic view of the project task assignment input screen showing

task results;

Figure 25 is a schematic view of the task update maintenance input screen showing

addition of new tasks;

10   **Figure 26** is a schematic view of a skill level assignment input screen;

Figure 27 is a schematic view of the project task assignment input screen showing

task results and comments;

Figure 28A is a customizable template for a merchant sailor;

Figure 28B is a customizable template for a merchant sailor for which data has been

15   entered; and

Figure 28C is a customizable template for an airline pilot for which data has been

entered.

Detailed Description of the Preferred Embodiment

20   **Figures 1-4** illustrate a system for determining travel deductions for taxpayers who

stay overnight in cities remote from their homes as part of their employment **10** that includes

the following components. A city rate table **14** is provided. The city rate table **14** identifies

allowed per diem expense rates **18** for a given tax year **106** for a plurality of cities **48** as

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identified by a city codes **110**. Means **26** are provided for inputting and maintaining data in

the table **14**. Means **30** are provided for inputting cities visited **48** and durations of stay **38** for

a taxpayer **42**. Means **46** are provided for inputting expense reimbursements **50** received from

the taxpayer's employer. Means **54** are provided for calculating a total of all per diem

5   expenses **58** based upon the city rate table **14** and the input cities **48** and number of days of

stay **38** in the cities **48**. Means **62** are provided for offsetting the reimbursements **50** against

the total **58** to determine an incidental expense allowance **66**.

In a variant of the invention, as illustrated in **Figure 5**, a client information table **70** is

provided. The client information table **70** includes a taxpayer's name **42**, address **74**, zip code

10   78, Social Security number **82** and a work code **86**. A USA States table **90** is provided as

illustrated in **Figure 6**. The States table **90** includes each state's name **94**, a state ID code **190**,

a lower 48 state code **98**, and an IRS center code **102**. The city rate table **14** as illustrated in

Figure 1, also includes a tax year **106**, a city code **110**, combined meal and incidental rate

114, full rate **118**, and high cost city code **122**. As illustrated in **Figure 6A**, a city name table

15   is provided. The city name table includes city code **110**, city **48**, state ID code **190**, and

country name **56**. Supporting schedules **126** as illustrated in **Figures 4** and **18**, are provided.

The supporting schedules **126** merge data from the client information table **70**, the USA States

table **90**, and the city rate table **14** with the input cities **48** and durations of stay **38** for the

taxpayer **42**. Means are provided for inputting and maintaining data in each of the tables **14,**

20   **70, 90, 126.**

In a further variant as illustrated in **Figure 7**, an airport table **130** is provided. The

airport table **130** includes an airport identifier code **134**, an airport name **138**, city code **142**

and country name **146**. When a location is input using either of an airport identifier code **134**

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and an airport name **138**, the appropriate city **48** is determined for use in the supporting schedules **126**.

In yet a further variant of the invention as illustrated in **Figure 8**, an airline table **150** is provided. The airline table **150** includes an airline name **154** and an airline ID number **158**. The airline table **150** permits data merged with the client information table **70** to be sorted by airline **154**.

In still a further variant as illustrated in **Figure 9**, an IRS service centers table **162** is provided. The IRS service centers table **162** includes an IRS mailing address for tax return submission **166**, an IRS mailing address for submitting estimated tax payments **170** and an IRS ID code **174**. The IRS service centers table **162** is merged with the supporting schedules **126** to determine an address **166, 170** to mail either of a taxpayer's federal tax return and a taxpayer's federal estimated tax payments to.

In another variant as illustrated in **Figure 10**, a state service centers table **178** is provided. The state service centers table **178** includes a state income tax mailing address for tax return submission **182**, a state mailing address for submitting estimated tax payments **186** and a state ID code **190**. The state service centers table **178** is merged with the supporting schedules **126** to determine an address **182, 186** to mail either of a taxpayer's state tax return and a taxpayer's state estimated tax payments to.

In still another variant of the invention as illustrated in **Figure 11**, a zip code table **194** is provided. The zip code table **194** includes a five-digit zip code **78**, a corresponding city **48**, county **198** and state **202**. The zip code table **194** is used to verify the zip code **78** input in the client information table **70** and to provide the taxpayer's county **198**. The zip code table **194** is used to generate mailing labels (not shown) for the taxpayer's state and federal tax returns.

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In yet another variant as illustrated in **Figure 12**, an attachments table **210** is provided. The attachments table **210** stores links **132** to IRS and state tax publication pages, tax year **106** and work code **86**. The attachments table **210** is compared to the client information table **70** to determine appropriate publication pages to include with the taxpayer's tax returns.

5   In still another variant as illustrated in **Figure 14**, a meal rate percent table **214** is provided. The meal rate percent table **214** includes the tax year **106** and meal rate percent **218**. The meal rate percent **218** is used to reduce the meal rate **114** allowed.

In yet another variant of the invention as illustrated in **Figure 4**, supporting schedules **126** display a taxpayer's travel computations and provides means to calculate the taxpayer's travel deduction based upon the plurality of travel calculation rates allowed by the IRS. The supporting schedules **126** provide means **46** to enter the expense reimbursements **50** received from the taxpayer's employer. The supporting schedules **126** provide means **224** to optionally decline use of the meal rate percent table **214** to reduce the meal rate **114** allowed. The supporting schedules **126** provide means **226** to print out IRS publications and revenue procedures related to the taxpayer's occupation. The supporting schedules **126** provide means **230** to print out an IRS rate sheet **234** for each city **48** visited. The rate sheets **234** are printed in descending order based upon the taxpayer's travel deduction for each city **48** visited with the city **48** highlighted on each sheet **234**.

In a further variant, as illustrated in **Figures 28A, 28B** and **28C**, a plurality of customizable document templates **238** are provided. The templates **238** are selected by the system **10** based upon tax year **106**, work code **86**, combined meal and incidental rate **114**, incidental portion **116** and full rate **118** applied and an amended return code **242**. The templates **238** include a taxpayer's name **42**, Social Security number **82**, tax year **106**,

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occupation description **246**, legal justification for claiming travel deductions **250**, each city visited **48**, applicable deduction **254** for the city **48**, a total travel deduction figure **258**, expense reimbursements **50** received from the taxpayer's employer, meal rate percent **218** for the tax year **106**, a meal rate percent reduction amount **262** and a remaining amount available

5   **266** for deduction.

In still a further variant as illustrated in **Figure 15**, a ship location table **270** is provided. The ship location table **270** includes city rate codes **142** for each day of a tax year **106** for a plurality of ship name codes **274**. As illustrated in **Figure 16**, means **278** are provided for inputting names of ships **282** on which a taxpayer **42** has worked and starting **286** and ending **290** dates for work on each of the ships **282**. As illustrated in **Figures 15 and 18**, means **294** are provided for determining locations **142** and durations of stay **38** for the taxpayer **42** based upon the ship location table **270** and the input ship names **282** and starting **286** and ending **290** dates for work on each of the ships **282**.

In yet a further variant as illustrated in **Figure 19**, a shipping company documents table **298** is provided. The shipping company documents table **298** includes a shipping company ID code **302** and a pointer to a shipping company document file name **306**. A shipping companies table **310** as illustrated in **Figures 13** and **17**, is provided. The shipping companies table **310** including the shipping company ID code **302** and a shipping company name **314**. Means **318** are provided for printing the shipping company document **306**.

20   In still a further variant, as illustrated in **Figures 20** and **21**, a ship names table **322** is provided. The ship name table **322** includes a ship name code **326**, the ship name **282**, the shipping ID code **302** and each ship's e-mail address **330**.

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In another variant of the invention, as illustrated in **Figures 1, 4, 15** and **18**, supporting schedules **126** merge the ships location table **270** and the city rate table **14** to provide meal and incidental rates **114** and full rates **118** for each city **48** visited. Means **338** are provided for determining the highest meal and incidental rates **114** and full rates **118** applicable for taxpayers **42** traveling between cities **48** for at least one day.

In still another variant, as illustrated in **Figure 22**, a series of data entry templates **342** is provided. The templates **342** include the ship locations **142** recorded in the ship location table **270** for names of ships **282** associated with each shipping company name **314**. The templates **342** permit rapid entry of ship locations **142** for ships **282** following identical routes, the routes having different starting dates.

In yet another variant, as illustrated in **Figure 18**, means **346** are provided for reviewing the travel start **286** and end **290** dates for any input ship name **282** and tax year **106**.

In a further variant, as illustrated in **Figures 15** and **16**, a merchant sailor schedule table **350** is provided. The merchant sailor schedule table **350** includes the taxpayer's name **42**, the ship name **282**, the trip start date **286** and the trip end date **290** as recorded on the taxpayer's U.S. Coast Guard Discharge Papers. The merchant sailor schedule table **350** is used in conjunction with the ship location table **270** to provide the incidental portion **116** of meal rates **114** and full rates **118** for each city **48** visited by the taxpayer **42** in a tax year **106**, as illustrated in **Figure 28B**.

In still a further variant of the invention, as illustrated in **Figure 23**, means **358** are provided for printing a ports of call statement **362** illustrating the location of a ship **282** for each day of a tax year **106**.

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In yet a further variant, as illustrated in **Figure 5** and **16**, means **366** are provided for accessing the client information table **70** and the merchant sailor schedule table **350** to provide a listing of all of the taxpayers **42** associated with any ship **282** during a tax year **106** and the means **74** for contacting the taxpayers **42**.

5   In another variant, as illustrated in **Figures 16** and **18**, means **370** are provided for displaying a chronological listing **374** of all of the U.S. Coast Guard Discharge Paper data input for the taxpayer **42** for a tax year **106** to the merchant sailor schedule table **350** to determine if any travel days are unaccounted for.

In a final variant of the invention, as illustrated in **Figures 24-27**, means **378** for identifying all tasks **382** associated with the preparation of a tax return are provided as are means **386** for identifying all results **390** associated with the performance of the tasks **382**. Means **394** are provided for linking the results **390** to a subsequent task **382**. Means **398** are provided for determining the skill level **402** of a tax preparation worker **406** required to complete each task **382** as are means for identifying the skill level **402** of each tax preparation worker **406**. Means **410** are provided for assigning each uncompleted task **382** to workers **406** of the required skill level **402** as are means **414** for indicating which worker **406** will work on each task **382**. Means **418** are provided for indicating completion of each task **382** for removal from the system **10**.

The income tax preparation system for traveling taxpayers **10** has been described with reference to particular embodiments. Other modifications and enhancements can be made without departing from the spirit and scope of the claims that follow.